2007 WAIS/FRISP Workshop (14th Annual WAIS)

AGENDA

Wednesday, September 5, 2007		
4:00 to 6:00	Registration	Main Building
7:00 to 9:00	INFORMAL DINNER (Pizza and Drinks)	Cottage #1

Thursday, September 6, 2007		
8:00	BREAKFAST	Main Building
8:00	Registration	Main Building
9:00	Welcomes and Introductions	Main Building
	Topic #1: Ice Shelves and Oceans	
9:30	First (1957-58) Geophysical Investigation of the Filchner-Ronne Ice Shelf	Behrendt
9:45	Basement architecture and sedimentary cover in the Amundsen Sea Embayment: Parameters for reconstructing ice-sheet expansion?	Gohl
10:00	Transient Temperatures and Redoubtable Reticence in the Amundsen	Jacobs
10:15	Location and timing of Circumpolar Deep Water intrusions onto the Amundsen Sea continental shelf simulated with an isopycnic coordinate ocean model	Jenkins
10:30	The Filchner Ice Shelf Water Overflow	Osterhus
10:45	BREAK (30 min.)	
11:15	Modeling the impact of tidal currents on ocean circulation beneath Filchner-Ronne Ice Shelf	Makinson
11:30	Oceanographic and Bathymetric Observations at the Ilulissat Ice Fjord	Holland, D.
11:45	The response of ice-shelf basal melting to variation in ocean temperature	Holland, P.
12:00	Poster Introductions (30 min.)	
12:30	LUNCH (90 min.)	
2:00	Effects of changes in the open ocean on the melting underneath the Ross Ice Shelf in a model of the Ross Sea	Dinniman
2:15	A calving law for ice shelves: spreading-rate control of calving rate	Alley
2:30	When iceberg calving matters: An investigation into the feedbacks between iceberg calving and dynamic changes in the flow of inland ice	Bassis
2:45	Ice-y Breakups: How I Lost My AMIGOS in Antarctica	Scambos
3:00	PANEL DISCUSSION (30 min.)	Plenary
3:30	BREAK (30 min.)	

Thursday, September 6, 2007 (cont.)		
	Topic #2: Ice Stream Grounding Lines	
4:00	Radar attenuation and temperature near the grounding line of Whillans Ice Stream	MacGregor
4:15	Grounding line migration and ice shelf buttressing in a two-dimensional marine ice stream model	Goldberg
4:30	A Modern Analogy to Explain Relict Grounding Lines of Kamb IceStream, Antarctica	Catania
4:45	Treatment of grounding-line dynamics in ice sheet-shelf models	Pollard
5:00	PANEL DISCUSSION (30 min.)	Plenary
5:30	BREAK (30 min.)	
6:00	DINNER	Main Building

Friday, September 7, 2007		
	Topic #3: Ice Stream Bases	
9:00	GPS measurements from Pine Island Glacier	Scott
9:15	Basal conditions on Pine Island Glacier	Smith, A.
9:30	A recent volcanic eruption in West Antarctica	Corr
9:45	Mapping West Antarctic subglacial processes using detailed basal morphology: Implications for Thwaites Glacier, based on knowledge gained from the Siple Coast	Young
10:00	The evolution of surface flow stripes and stratigraphic folds within Kamb Ice Stream - why don't they match?	Campbell
10:15	BREAK (45 min.)	
11:00	Spatial Variation of Basal Conditions on Kamb Ice Stream	Jacobel
11:15	How sticky are sticky spots? Constraints from passive seismic	Winberry
11:30	Decadal dynamics of basal conditions as viewed from the ice bulge on Kamb Ice Stream	Tulaczyk
11:45	Subglacial lakes: They're (almost) everywhere	Smith, B.
12:00	A linked system of lakes on MacAyeal Ice Stream	Fricker
12:15	LUNCH (90 min.)	
1:45	Effects of the ice-stream basal conditions on its surface elevation. Cry for velocity data	Sergienko
2:00	Using inverse methods to recover basal velocities	Truffer
2:15	PANEL DISCUSSION (30 min.)	Plenary
2:45	BREAK (30 min.)	

Friday, September 7, 2007 (cont.)		
	Topic #4: Ice Sheets	
3:15	Advances in describing recent Antarctic climate variability	Bromwich
3:30	Antarctic ice mass fluxes from satellite observations and a regional climate model	Bamber
3:45	WAIS wasting in the Amundsen Sea Embayment since the Last Glacial Maximum	Larter
4:00	Solving for a history of ice thickness in the southern Ross Sea Embayment using inverse methods and surface-exposure ages	Todd
4:15	BREAK (30 min.)	
4:45	A preliminary cyclostratigraphic and paleo-environmental analysis of the new high-resolution McMurdo Ice Shelf (ANDRILL) drill core has implications for WAIS history and dynamics	Powell
5:00	What can ANDRILL tell us of long-term WAIS history?	Scherer
5:15	Antarctic Scientific Drilling: What, Where, and Why	Rack
5:30	BREAK (30 min.)	
6:00	DINNER	Main Building

Saturday, September 5, 2007		
8:30	Lost, but found: A large WAIS drainage basin existed in the southern Bellingshausen Sea during the last glacial period	Hillenbrand
8:45	Boundary conditions for a full-momentum solver: 1) The dilemma of sliding and 2) how do we do embedded models?	Fastook
9:00	Thermal Convection and the Origin of Ice Streams	Hughes
9:15	Tipping points: nonlinearity and hysteresis in ice sheets	Schoof
9:30	Millennial versus orbital influences on ice marginal fluctuation: the southern signal	Vacco
9:45	Ice sheets in the Community Climate System Model	Lipscomb
10:00	PANEL DISCUSSION (30 min.)	Plenary
10:30	GUEST FEEDBACK	
11:00	WAIS/FRISP business	
12:00	Adjourn	

Posters

A Monte Carlo Investigation of Inherited Cosmogenic Nuclides in Moraine Boulders	Applegate
Glacial history of the Ellsworth Mountains, Weddell Sea embayment, West Antarctica	Bentley, M.
Thickness and Structure of the Crust beneath the Thwaites Glacier Catchment, West Antarctica	Diehl
Numerical modeling of subglacial-sediment dynamics	duBois
When the Bough Breaks: Implementing an Empirical Calving Rule in a Dynamic Stream/Shelf Model'	Dupont
Investigations of near-vertical subsurface structures near Swiss Camp, Greenland	Greenbaum
Progress towards an Image-Enhanced 250 m DEM for the West Antarctic Ice Sheet	Haran
Developing a long term strategy for using AUVs in polar research	Heywood
A model of tidally-dominated ocean processes near ice-shelf grounding lines	Holland, P.
Patterns of glacier response to disintegration of the Larsen B ice shelf, Antarctic Peninsula	Hulbe
LC-130 Deep Field Capabilities	James
First exposure ages from the Amundsen Sea embayment, West Antarctica: the Late Quaternary context for recent thinning of Pine Island, Smith and Pope Glaciers	Johnson.
The influence of sea-ice and the Ross Ice shelf on water properties	Klinck
Connections between meteorology and chemistry in surface snow: Clark Glacier, McMurdo Dry Valleys, Antarctica	Kreutz
Large scale modeling of ice flow for the entire Antarctica continent	Larour
A coupled ice/water flow model for West Antarctica	LeBrocq
Accumulation Rates Over the Thwaites Glacier Catchment, West Antarctica, Using Radar Reflection Layers	Leuro
Potential Vorticity Constraints on Buoyancy-Forced Circulation in Ice Shelf Cavities	Little
Opportunities (?) for Probabilistic Assessment of Ice Sheet Response to Climate Change	Little
Exposure ages from mountain dipsticks indicate little change in East Antarctic Ice Sheet thickness since the Last Glacial Maximum and stability from the mid Holocene	Mackintosh
Detection of in-situ ice fabric anisotropy using polarimetric radar method near WAIS Divide	Matsuoka
A sediment model and retreat history for the Ross Ice Shelf (Sheet) since the LGM	McKay
Sensitivity of ice-shelf/ocean interactions to vertical resolution and thermodynamic parameterizations in the ROMS model	Mueller
Bathymetry of the Amundsen Sea Continental Shelf	Nitsche
Bipolar Atlantic Thermohaline Circulation (BIAC) IPY Cluster # 23	Osterhus
Focused SAR Processing of Airborne Radar Sounding Data from Kamb Ice Stream	Peters
Basal conditions at two sticky spots along Kamb Ice Stream, West Antarctica	Peters
Cenozoic variations of the Antarctic Ice Sheet: a model-data mismatch?	Pollard
High-salinity waters beneath the margin of the West Antarctic ice sheet - evidence from ANDRILL porwater studies	Quintana-Krupinski
ANDRILL's Education and Public Outreach Efforts	Rack
Significant Glacier Thinning (Or Not) in the Larsen B Embayment	Shuman
Ice shelf melting in the Amundsen Sea from oceanographic observations	Shoosmith

Posters (cont.)	
From shelf break to ice shelves: oceanographic observations in the Bellingshausen Sea, Summer 2007	Shoosmith
Estimating the salinity of subglacial lakes from aerogeophysical data	Studinger
Development of an aerogeophysical imaging system for polar applications: Phase I: Gravimeter test flights to the North Pole	Studinger
Moho topography of the West Antarctic Rift System from inversion of aerogravity data: ramifications for geothermal heat flux and ice streaming	Studinger
Optical probing of glacial ice using short-pulse lasers	Talghader
Surface exposure ages from Reedy Glacier, Antarctica	Todd
The Science and Art of LIMA	Vornberger
Long-term Mass Balance of the Pacific Ocean Sector of Antarctica Based on Multisensor Fusion	Yoon
Comprehensive surface elevations for Thwaites Glacier: Results from AGASEA airborne laser altimetry	Young